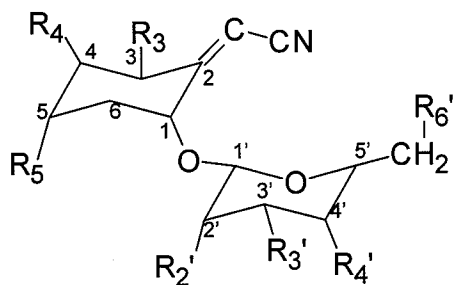


SIMMONDSIN FOR USE AS AN ANGIOGENESIS INHIBITOR

Abstract of the Disclosure

Methods of inhibiting angiogenesis in humans and animals by administering a effective amount of a secondary plant metabolite from jojoba, having the general formula I shown below, are disclosed. Preferred compounds having general formula I include 4-desmethylsimmondsin, 5-desmethylsimmondsin, 4,5-didesmethylsimmondsin, 4,5-dimethylsimmondsin, 4-desmethylsimmondsin-2'-ferulate, 5-desmethylsimmondsin-2'-ferulate, 4,5-didesmethylsimmondsin-2'-ferulate and 4,5-dimethylsimmondsin-2'-ferulate. Such compounds can be synthesized chemically according to well known techniques or can be isolated from refined and de-oiled jojoba flour by conventional extraction techniques using polar solvents such as a ketone or a low boiling point alcohol. Pharmaceutical compositions for inhibiting angiogenesis or for treating angiogenesis-related diseases in humans or animals are disclosed.



General Formula 1